Applied Animal Behaviour Science, 26 (1990) 395–397
Elsevier Science Publishers B.V., Amsterdam

Author Index

Ahmad Khan, J., *see* Naheed, G. and Ahmad Khan, J.
Algers, B., Jensen, P. and Steinwall, L. (Skara, Sweden)
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality 143
Algers, B. (Skara, Sweden), Rojanasthien, S. (Uppsala, Sweden) and Uvnäs-Moberg, K. (Stockholm, Sweden)
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing 267
Anderson, D.M., Hulet, C.V. Smith, J.N. (Las Cruces, NM, U.S.A.), Hamadeh, S.K. (Beirut, Lebanon) and Murray, L.W. (Las Cruces, NM, U.S.A.)
Diet selection of bonded and non-bonded free-ranging sheep and cattle 231
Appleby, M.C., *see* Manson, F.J. and Appleby, M.C.
Ayling, S.J., *see* McGregor, P.K. and Ayling, S.J.
Bond, J.C. (Davis, CA, U.S.A.) and Lindburg, D.G. (San Diego, CA, U.S.A.)
Carcass feeding of captive cheetahs (*Acinonyx jubatus*): the effects of a naturalistic feeding program on oral health and psychological well-being 373
Day, B.N., *see* Rohde Parfet, K.A. et al.
Dellmeier, G., Friend, T. (College Station, TX, U.S.A.) and Gbur, E. (Fayetteville, AR, U.S.A.)
Effects of changing housing on open-field behavior of calves 215
Duncan, I.J.H., Hocking, P.M. and Seawright, E. (Midlothian, Gt. Britain)
Sexual behaviour and fertility in broiler breeder domestic fowl 201
Friend, T., *see* Dellmeier, G. et al.
Ganjam, V.K., *see* Rohde Parfet, K.A. et al.
Gbur, E., *see* Dellmeier, G. et al.
Hamadeh, S.K., *see* Anderson, D.M. et al.
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
The stress response in sheep during routine handling procedures 83
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure 91
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
An evaluation of the contribution of isolation, up-ending and wool removal to the stress response to shearing 103
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
The effect of gentling on heart rate, flight distance and aversion of sheep to a handling procedure 243
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
Some effects of repeated handling on stress responses in sheep 253
Haskell, M.J., *see* Hutson, G.D. and Haskell, M.J.
Hocking, P.M., *see* Duncan, I.J.H. et al.
Hopster, H., *see* Wierenga, H.K. and Hopster, H.
Houpt, K.A., *see* Zahorik, D.M. et al.
Hulet, C.V., *see* Anderson, D.M. et al.
Hutson, G.D., *see* Hargreaves, A.L. and Hutson, G.D.
Hutson, G.D. and Haskell, M.J. (Parkville, Vic., Australia)
The behaviour of farrowing sows with free and operant access to an earth floor 363

Innes, S., *see* Kovacs, K.M. and Innes, S.
Jensen, P., *see* Algers, B. et al.
Jeppesen, L.L., *see* Pedersen, V. and Jeppesen, L.L.
Kojola, I. (Meltaus, Finland)
Intraherd spacing behaviour of female reindeer: effects of kinship, age and habituation ... 41
Kooijman, J., *see* van Liere, D.W. et al.
Kovacs, K.M. (Waterloo, Ont., Canada) and Innes, S. (Rockwood, Ont., Canada)
The impact of tourism on harp seals (*Phoca groenlandica*) in the Gulf of St. Lawrence, Canada ... 15
Lamberson, W.R., *see* Rohde Parfet, K.A. et al.
Lindburg, D.G., *see* Bond, J.C. and Lindburg, D.G.
Manson, F.J. and Appleby, M.C. (Edinburgh, Gt. Britain)
Spacing of dairy cows at a food trough ... 69
McGregor, P.K. and Ayling, S.J. (Nottingham, Gt. Britain)
Varied cages result in more aggression in male CFLP mice ... 277
Murray, L.W., *see* Anderson, D.M. et al.
Naheed, G. and Ahmad Khan, J. (Aligarh, India)
"Poison shyness" and "bait shyness" developed by wild rats (*Rattus rattus* L.). IV. Effect of poisoning with thallous sulphate ... 49
Orihuela, A. (Morelos, Mexico)
Effect of the calf stimulus on the milk yield of Zebu-type cattle ... 187
Pedersen, V. (Tjele, Denmark) and Jeppesen, L.L. (Copenhagen, Denmark)
Effects of early handling on later behaviour and stress responses in the silver fox (*Vulpes vulpes*) ... 383
Petersen, V., Vestergaard, K. (Frederiksberg C., Denmark) and Recén, B. (Skara, Sweden)
Behaviour of sows and piglets during farrowing under free-range conditions ... 169
Price, E.O. and Wallach, S.J.R. (Davis, CA, U.S.A.)
Rearing bulls with females fails to enhance sexual performance ... 339
Recén, B., *see* Petersen, V. et al.
Redbo, I. (Uppsala, Sweden)
Changes in duration and frequency of stereotypies and their adjoining behaviours in heifers, before, during and after the grazing period ... 57
Rieke, A.R., *see* Rohde Parfet, K.A. et al.
Rogers, L.J., *see* Workman, L. and Rogers, L.J.
Rohde Parfet, K.A., Ganjam, V.K., Lamberson, W.R., Rieke, A.R., vom Saal, F.S. and Day, B.N. (Columbia, MO, U.S.A.)
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior ... 349
Rojanasthien, S., *see* Algers, B. et al.
Seawright, E., *see* Duncan, I.J.H. et al.
Shackleton, D.M., *see* Tan, S.S.L. and Shackleton, D.M.
Smith, J.N., *see* Anderson, D.M. et al.
Steinwall, L., *see* Algers, B. et al.
Swartzman-Andert, J., *see* Zahorik, D.M. et al.
Tan, S.S.L. and Shackleton, D.M. (Vancouver, B.C., Canada)
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs ... 157
Uvnäs-Moberg, K., *see* Algers, B. et al.
Van de Burgwal, J.A., *see* van Putten, G. and van de Burgwal, J.A.
Van Liere, D.W., Kooijman, J. and Wiepkema, P.R. (Wageningen, The Netherlands)
Dustbathing behaviour of laying hens as related to quality of dustbathing material ... 127

Van Putten, G. and van de Burgwal, J.A. (Zeist, The Netherlands)
Vulva biting in group-housed sows: preliminary report 181
Vestergaard, K., *see* Petersen, V. et al.
Vom Saal, F.S., *see* Rohde Parfet, K.A. et al.
Wallach, S.J.R., *see* Price, E.O. and Wallach, S.J.R.
Warwick, C. (Worcester, Gt. Britain)
Reptilian ethology in captivity: observations of some problems and an evaluation of their aetiology 1
Wiepkema, P.R., *see* van Liere, D.W. et al.
Wierenga, H.K. and Hopster, H. (Zeist, The Netherlands)
The significance of cubicles for the behaviour of dairy cows 309
Workman, L. and Rogers, L.J. (Armidale, N.S.W., Australia)
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming 115
Zahorik, D.M., Houpt, K.A. and Swartzman-Andert, J. (Ithaca, NY, U.S.A.)
Taste-aversion learning in three species of ruminant 27

Applied Animal Behaviour Science, 26 (1990) 399–403
Elsevier Science Publishers B.V., Amsterdam

Subject Index

Aetiology
Reptilian ethology in captivity: observations of some problems and an evaluation of their aetiology 1
Aggression
Varied cages result in more aggression in male CFLP mice 277
Animal welfare
The science of animal welfare and the subjective experience of animals 191
Azaperone
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs 157
Bait shyness
"Poison shyness" and "bait shyness" developed by wild rats (*Rattus rattus* L.). IV. Effect of poisoning with thallous sulphate 49
Beak-trimming
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming 115
Behaviour
Behaviour of sows and piglets during farrowing under free-range conditions 169
The behaviour of farrowing sows with free and operant access to an earth floor 363
The significance of cubicles for the behaviour of dairy cows 309
Behaviour changes
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality 143
Behaviour responses
Effects of early handling on later behaviour and stress responses in the silver fox (*Vulpes vulpes*) 383
Broiler breeder domestic fowl
Sexual behaviour and fertility in broiler breeder domestic fowl 201
Bulls
Rearing bulls with females fails to enhance sexual performance 339
Calf stimulus
Effect of the calf stimulus on the milk yield of Zebu-type cattle 187
Calves
Effects of changing housing on open-field behavior of calves 215
Captive cheetahs
Carcass feeding of captive cheetahs (*Acinonyx jubatus*): the effects of a naturalistic feeding program on oral health and psychological well-being 373
Carcass feeding
Carcass feeding of captive cheetahs (*Acinonyx jubatus*): the effects of a naturalistic feeding program on oral health and psychological well-being 373
Cattle
Diet selection of bonded and non-bonded free-ranging sheep and cattle 231
CFLP mice
Varied cages result in more aggression in male CFLP mice 277
Chicks
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming 115
Cubicles
The significance of cubicles for the behaviour of dairy cows 309

Dairy cows
Spacing of dairy cows at a food trough 69
The significance of cubicles for the behaviour of dairy cows 309
Diet selection
Diet selection of bonded and non-bonded free-ranging sheep and cattle 231
Dustbathing behaviour
Dustbathing behaviour of laying hens as related to quality of dustbathing material 127
Early handling
Effects of early handling on later behaviour and stress responses in the silver fox (*Vulpes vulpes*) 383
Earth floor
The behaviour of farrowing sows with free and operant access to an earth floor 363
Farrowing
Behaviour of sows and piglets during farrowing under free-range conditions 169
Farrowing sows
The behaviour of farrowing sows with free and operant access to an earth floor 363
Fertility
Sexual behaviour and fertility in broiler breeder domestic fowl 201
Finishing pigs
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs 157
Food trough
Spacing of dairy cows at a food trough 69
Free-range conditions
Behaviour of sows and piglets during farrowing under free-range conditions 169
Gentling
The effect of gentling on heart rate, flight distance and aversion of sheep to a handling procedure 243
Grazing period
Changes in duration and frequency of stereotypies and their adjoining behaviours in heifers, before, during and after the grazing period 57
Group-housed sows
Vulva biting in group-housed sows: preliminary report 181
Grunting rate
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing 267
Haematocrit
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure 91
Handling
Some effects of repeated handling on stress responses in sheep 253
Handling procedure
The effect of gentling on heart rate, flight distance and aversion of sheep to a handling procedure 243
The stress response in sheep during routine handling procedures 83
Harp seals
The impact of tourism on harp seals (*Phoca groenlandica*) in the Gulf of St. Lawrence, Canada 15
Heart rate
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure 91

Heifers
Changes in duration and frequency of stereotypies and their adjoining behaviours in heifers, before, during and after the grazing period 57
Housing
Effects of changing housing on open-field behavior of calves 215
Intraherd spacing behaviour
Intraherd spacing behaviour of female reindeer: effects of kinship, age and habituation ... 41
Intrauterine position effects
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior 349
Kangaroos
Kangaroos (Book review) 305
Laying hens
Dustbathing behaviour of laying hens as related to quality of dustbathing material 127
Milk yield
Effect of the calf stimulus on the milk yield of Zebu-type cattle 187
Naturalistic feeding program
Carcass feeding of captive cheetahs (*Acinonyx jubatus*): the effects of a naturalistic feeding program on oral health and psychological well-being 373
Nutritive reward
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming 115
Open-field behavior
Effects of changing housing on open-field behavior of calves. 215
Oral health
Carcass feeding of captive cheetahs (*Acinonyx jubatus*): the effects of a naturalistic feeding program on oral health and psychological well-being 373
Oxytocin release
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing 267
Pecking preferences
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming 115
Piglets
Behaviour of sows and piglets during farrowing under free-range conditions 169
Pigs
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality 143
Plasma cortisol
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure 91
Poison shyness
"Poison shyness" and "bait shyness" developed by wild rats (*Rattus rattus* L.). IV. Effect of poisoning with thallous sulphate 49
Psychological well-being
Carcass feeding of captive cheetahs (*Acinonyx jubatus*): the effects of a naturalistic feeding program on oral health and psychological well-being 373
Rats
"Poison shyness" and "bait shyness" developed by wild rats (Rattus rattus L.). IV. Effect of poisoning with thallous sulphate 49
Reindeer
Intraherd spacing behaviour of female reindeer: effects of kinship, age and habituation ... 41

Reproductive performance
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior 349
Reptilian ethology
Reptilian ethology in captivity: observations of some problems and an evaluation of their aetiology 1
Ruminants
Taste-aversion learning in three species of ruminants 27
Sexual behaviour
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior 349
Sexual behaviour and fertility in broiler breeder domestic fowl 201
Sexual performance
Rearing bulls with females fails to enhance sexual performance 339
Shearing
An evaluation of the contribution of isolation, up-ending and wool removal to the stress response to shearing 103
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure 91
Sheep
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure 91
Diet selection of bonded and non-bonded free-ranging sheep and cattle 231
Some effects of repeated handling on stress responses in sheep 253
The effect of gentling on heart rate, flight distance and aversion of sheep to a handling procedure 243
The stress response in sheep during routine handling procedures 83
Silver fox
Effects of early handling on later behaviour and stress responses in the silver fox (*Vulpes vulpes*). 383
Social behaviour
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs 157
Intrauterine position effects in female swine: subsequent reproductive performance, and social sexual behavior 349
Sows
Behaviour of sows and piglets during farrowing under free-range conditions 169
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing 267
Stereotypies
Changes in duration and frequency of stereotypies and their adjoining behaviours in heifers, before, during and after the grazing period 57
Stress response
An evaluation of the contribution of isolation, up-ending and wool removal to the stress response to shearing. 103
Effects of early handling on later behaviour and stress responses in the silver fox (*Vulpes vulpes*) 383
Some effects of repeated handling on stress responses in sheep 253
The stress response in sheep during routine handling procedures 83

Subjective experience
The science of animal welfare and the subjective experience of animals 191
Swine
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior 349
Taste-aversion learning
Taste-aversion learning in three species of ruminants 27
Teat quality
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality 143
Teat stimulation
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing 267
Thallous sulphate
"Poison shyness" and "bait shyness" developed by wild rats (*Rattus rattus* L.). IV. Effect of poisoning with thallous sulphate 49
Tourism
The impact of tourism on harp seals (*Phoca groenlandica*) in the Gulf of St. Lawrence, Canada 15
Unfamiliar individuals
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs 157
Vulva biting
Vulva biting in group-housed sows: preliminary report 181
Weaning
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality 143
Weight changes
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality 143
Zebu-type cattle
Effect of the calf stimulus on the milk yield of Zebu-type cattle 187